International Educational Applied Research Journal

A Multi-Disciplinary Research Journal

E-ISSN No: 2456-6713

INTODUCTION OF SEEDS OF *Annona squamosa L.*

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DOI: https://doi.org/10.5281/zenodo.10802316

Abstract:

Small and well-branched, *Annona squamosa* is a member of the Annonaceae family and produces delicious fruits known as sugar apples or sweetsops [1] Compared to Annona reticulata and Annona cherimola, it is more tolerant to the tropical lowland climate. It originated in tropical regions of India, the Americas, and the West Indies. Spanish explorers carried it to Asia when their Manila galleons docked in the Philippines [2].

1. DESCRIPTION:

The fruit of *A. squamosa* (sugar-apple) has sweet whitish pulp, and is popular in tropical markets.

Branches with noticeable leaf scars and light brown bark; light yellow, slightly bitter inner bark; twigs turning brown with light brown dots (lenticels, which are tiny, rounded, oval places on a plant's stem or branch from which roots may sprout or underlying tissues may protrude) [3].

Greenish-yellow blooms on a hairy, slender 2 cm tall stalk, either solitary or in short lateral clusters of 2-4 approximately 2.5 cm long. Three green, rectangular, outer petals with a purplish base measure 1.6 to 2.5 cm in length and 0.6 to 0.75 cm in width. The three interior petals are either missing or reduced to tiny scales.

Fruits ripen 3 to 4 months after flowering

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The many, loosely connected pistils of a flower develop into huge, mushy fruits that are aggregate in nature and unlike any other fruit in the genus (looking more like an enormous raspberry).The ripe aggregate fruit is shaped like a heart or a circle, with a greenish yellow color and a thicker stem. It has numerous spherical protuberances and a powdery bloom covering it. The fruit ranges in diameter from 5 to 10 cm. Carpels, or the ripening pistels, loosely cohering or nearly free, form fruits. The pulp has a golden tinge to white, is edible, and has a pleasant scent. Each carpel has an oblong, smooth, shiny, dark brown to black, 1.3 to 1.6 cm long seed that is dark brown to black [4].

2. FIGURE:

Figure No. 01 ***CUSTARD APPLE (Annona squamosa L.)***

3. Seed of *Annona squamosa L.*:

The custard apple, also known as the sugar apple, is a tiny tree or shrub that is native to tropical and subtropical countries. It is a member of the Annonaceae family. Because the seeds of the

custard apple contain bioactive substances such acetogenins, cyclopeptides, flavonoids, and phenolic compounds, which are responsible for a variety of biological functions, these seeds have been used in traditional medicine. In addition, the seeds exhibit increased levels of amino acids, tannins, and vitamins C and E. Research has demonstrated that A. squamosa seeds have a great deal of potential for use as an antioxidant, hepatoprotective, antibacterial, and antitumor/anticancer agent. The custard apple seed extract cyclosquamosin B has vasorelaxant qualities. The seed oil also contains tocopherols and fatty acids, including oleic and linoleic acid. Anthropogenic acetogenins, which are strong inhibitors of mitochondrial complex I and highly cytotoxic, are abundant in the seeds of A. squamosa. A. squamosa seeds can be exploited for the creation of novel products, including pharmaceutical medications, according to a report that largely focused on the nutritional, phytochemical, and biological aspects. Clinical research and trials are still required to ascertain the health benefits that A. squamosa seeds contribute to, despite the fact that there are enough in vitro and in vivo experimental investigations demonstrating the advantages of seeds.

4. CONCLUSION:

Also known as *Annona squamosa*, as a significant herb in indigenous and **Ayurvedic medicine.**

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